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(56) Documents cited
GB 2236737 A GB 2111462 A GB 1364053 A
GB 1289577 A GB 1279232 A GB 0980551 A

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INT CL⁵ B65D 5/56 5/58 5/60

(54) A container

(57) A container (10) comprises a pair of nesting containers (12, 14) formed by an inner container (12) and an outer container (14) which snugly surrounds the inner container (12). The container is opened by tearing a tear strip from the outer container (10) to reveal the inner container (12) therebelow. The inner container is opened by peeling back a portion to reveal the containers' contents. The container can be sealed closed by pivoting the lid portion of the outer container over the opened inner container (12).

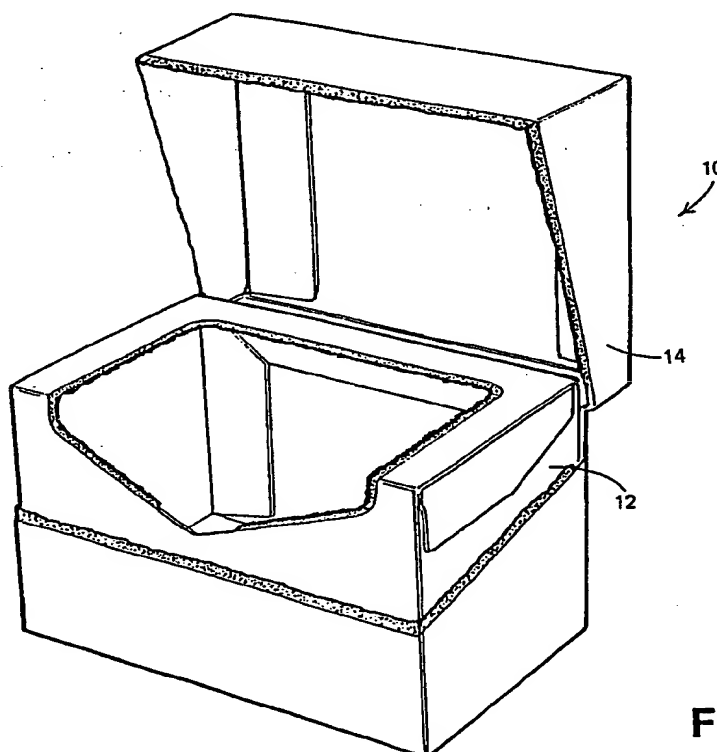


FIG. 1

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1990.

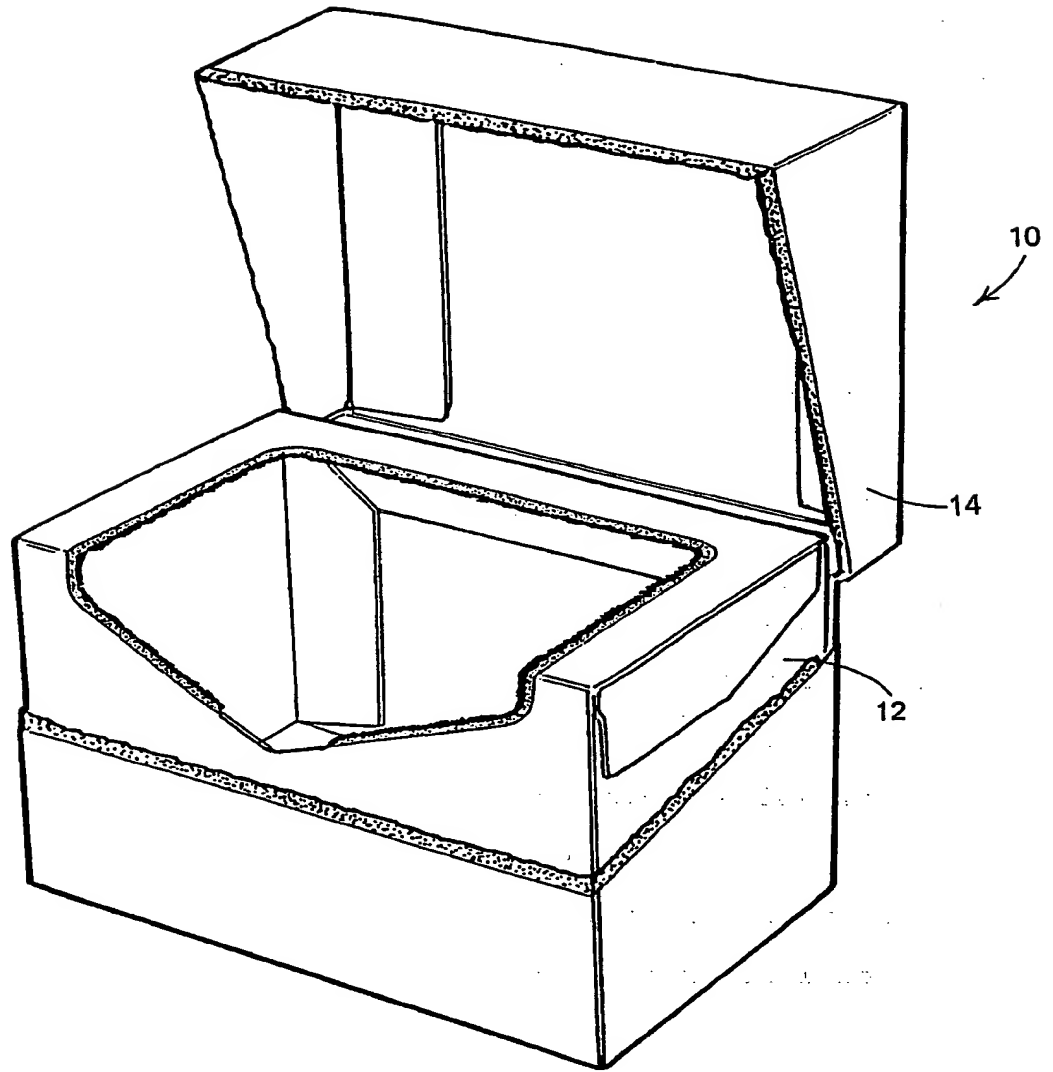


FIG. 1

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FIG. 2

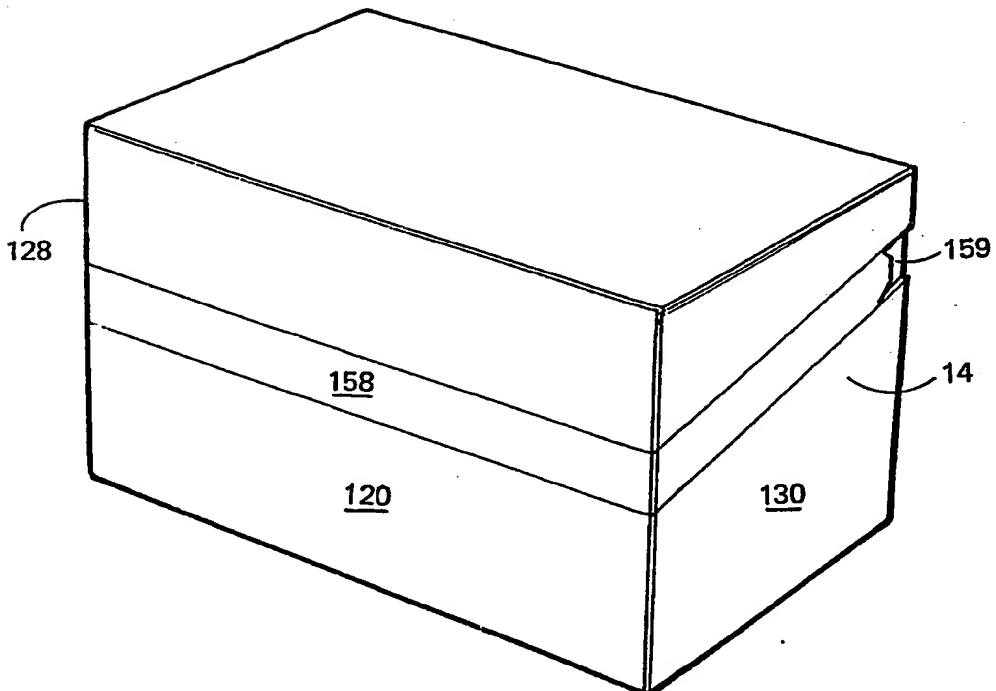
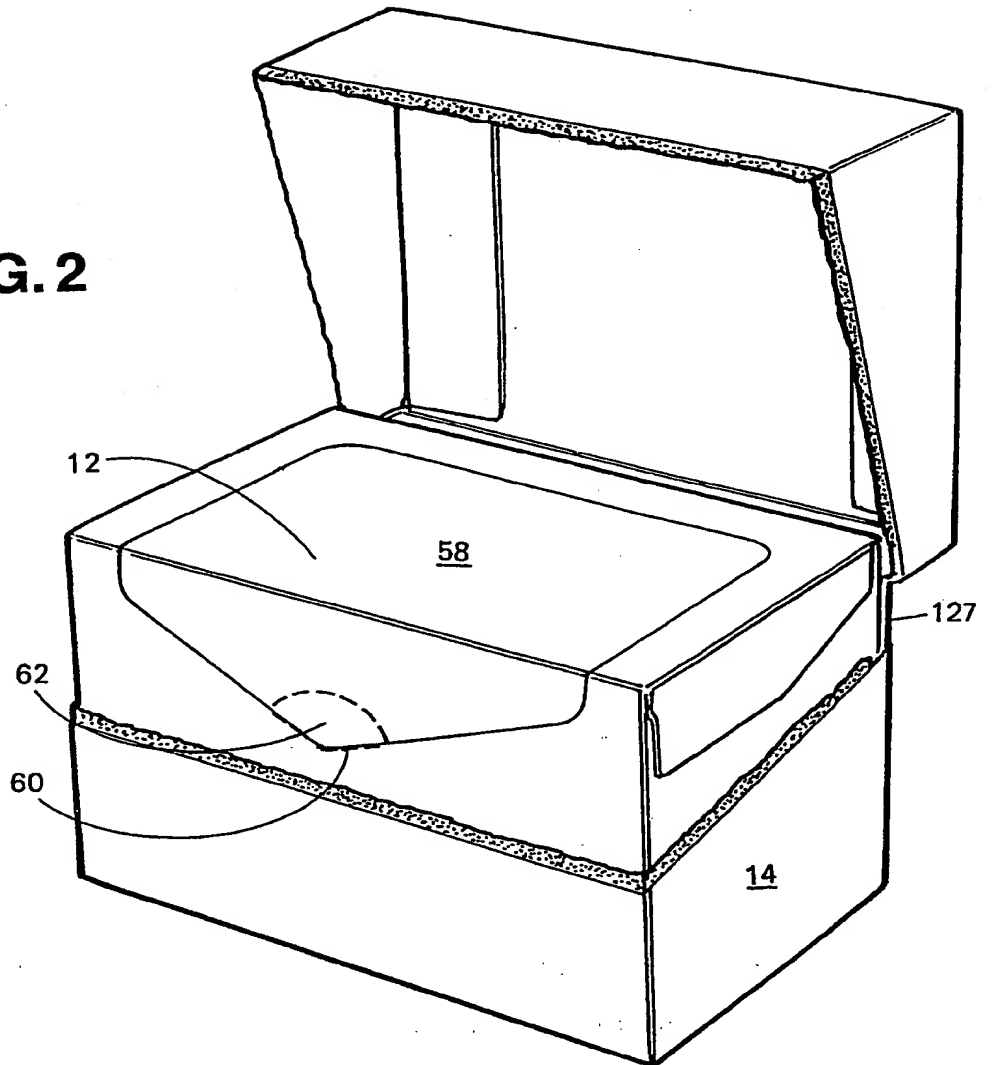


FIG. 3

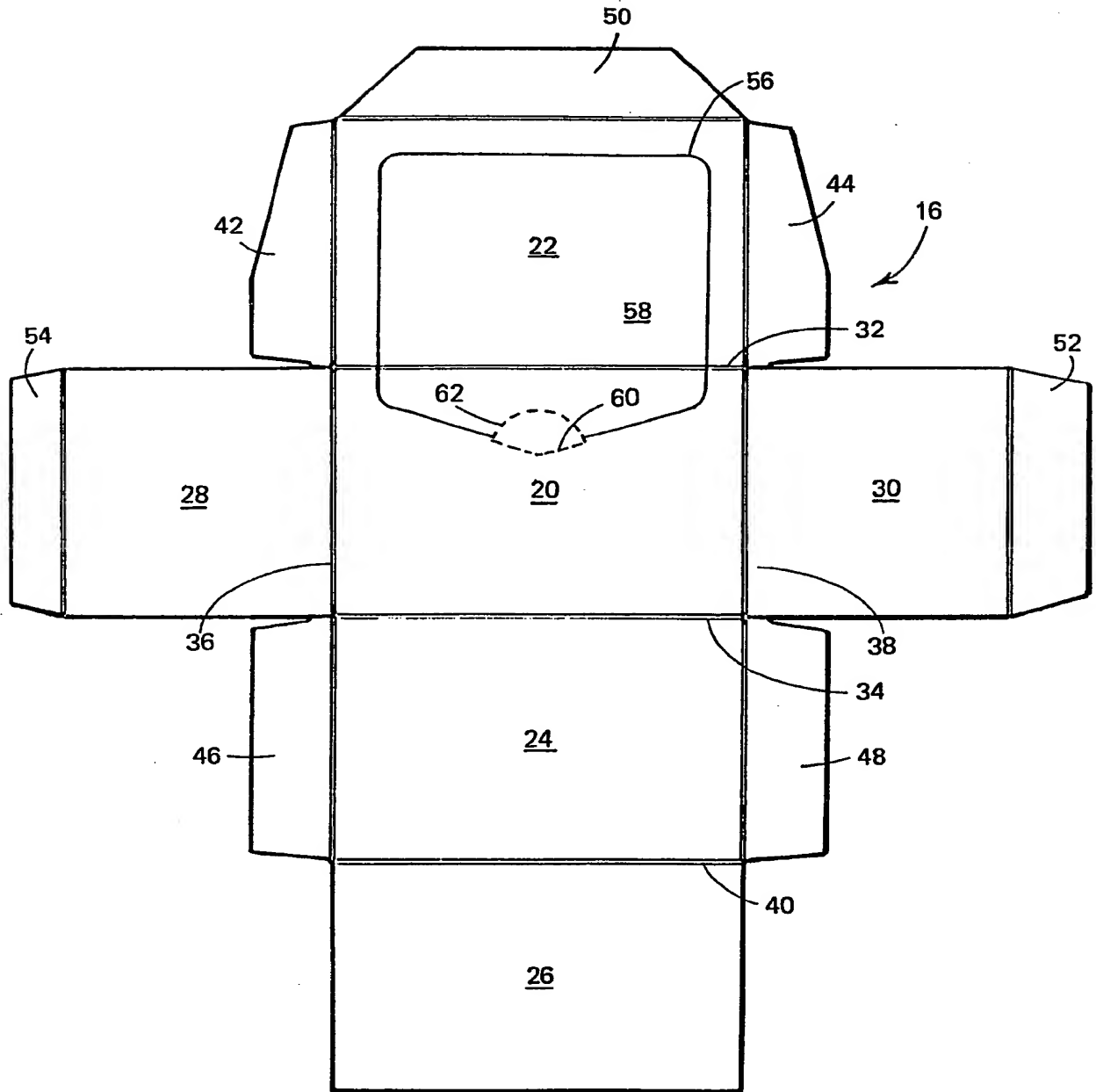


FIG. 4

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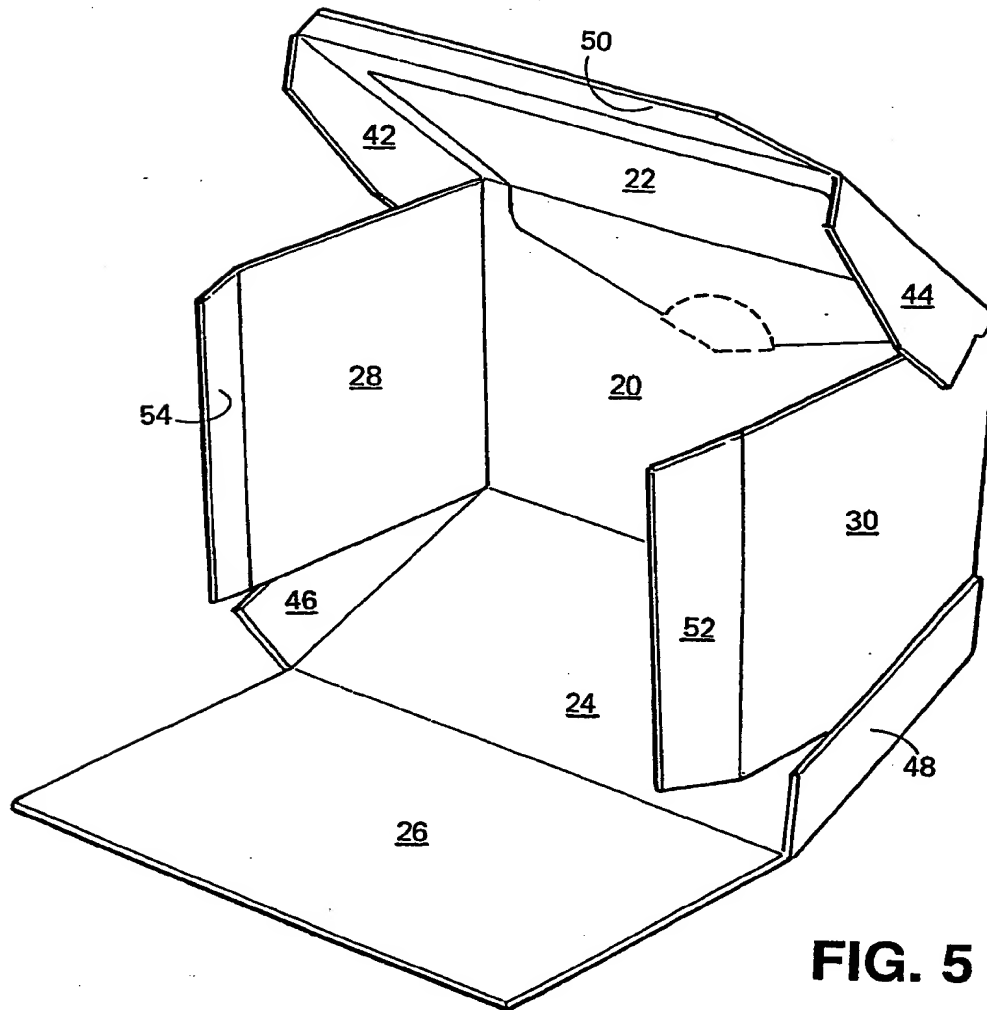


FIG. 5

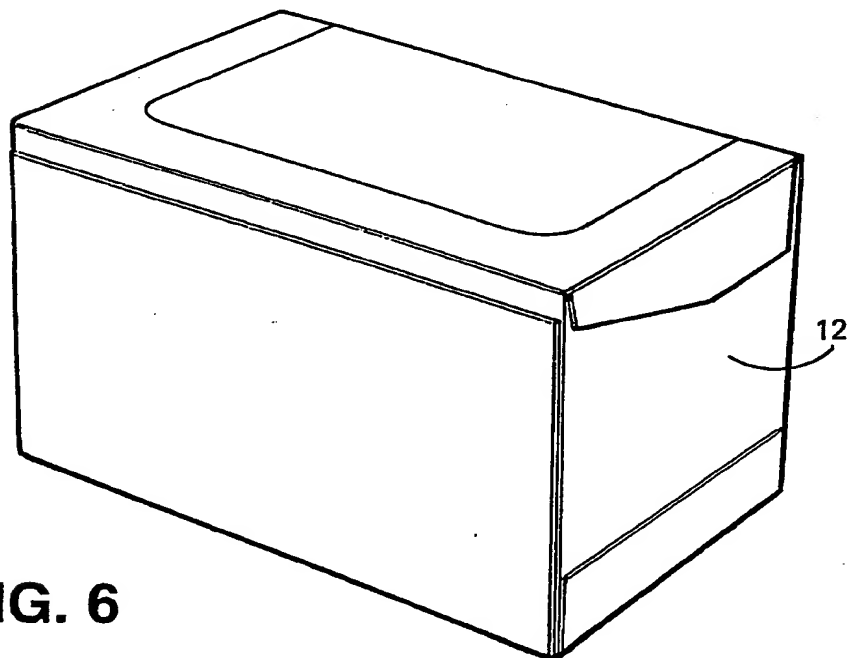


FIG. 6



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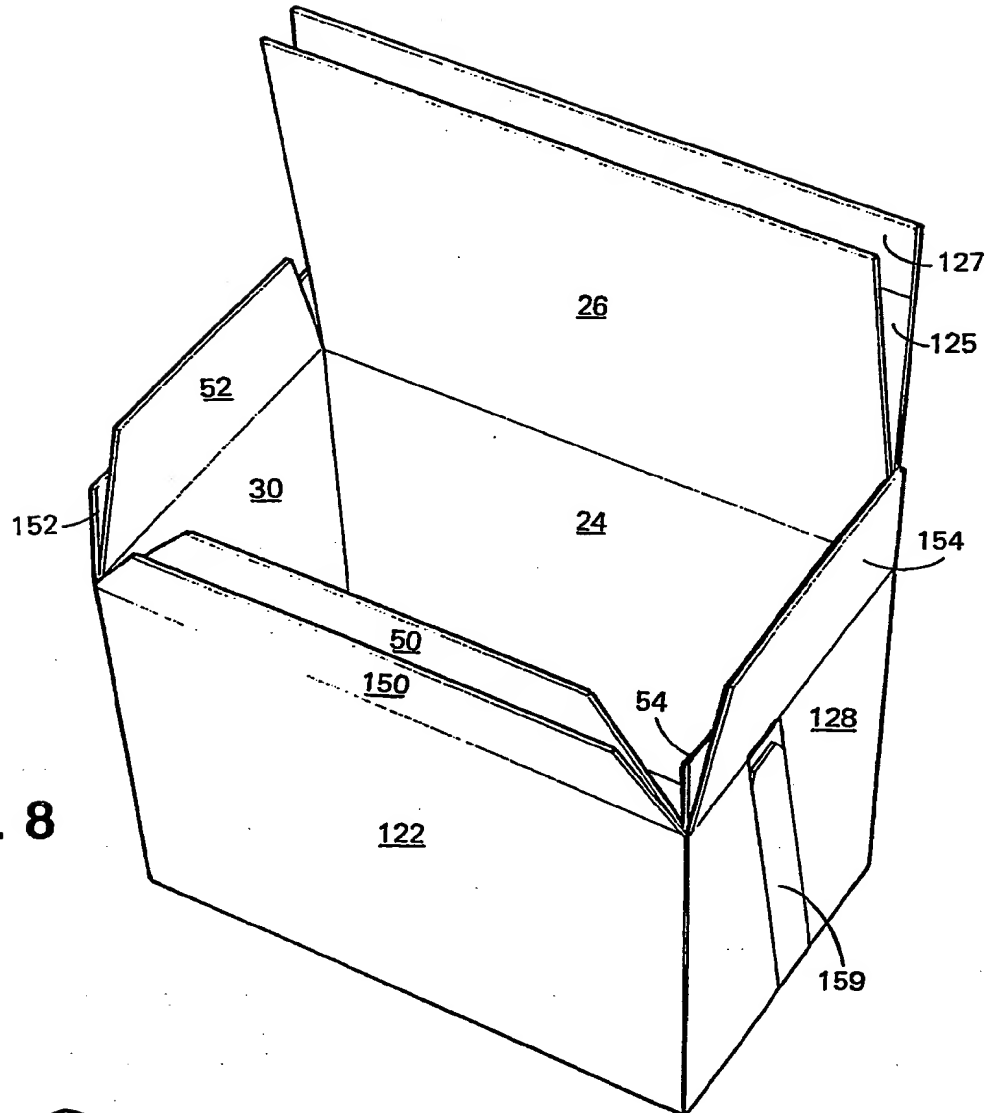


FIG. 8

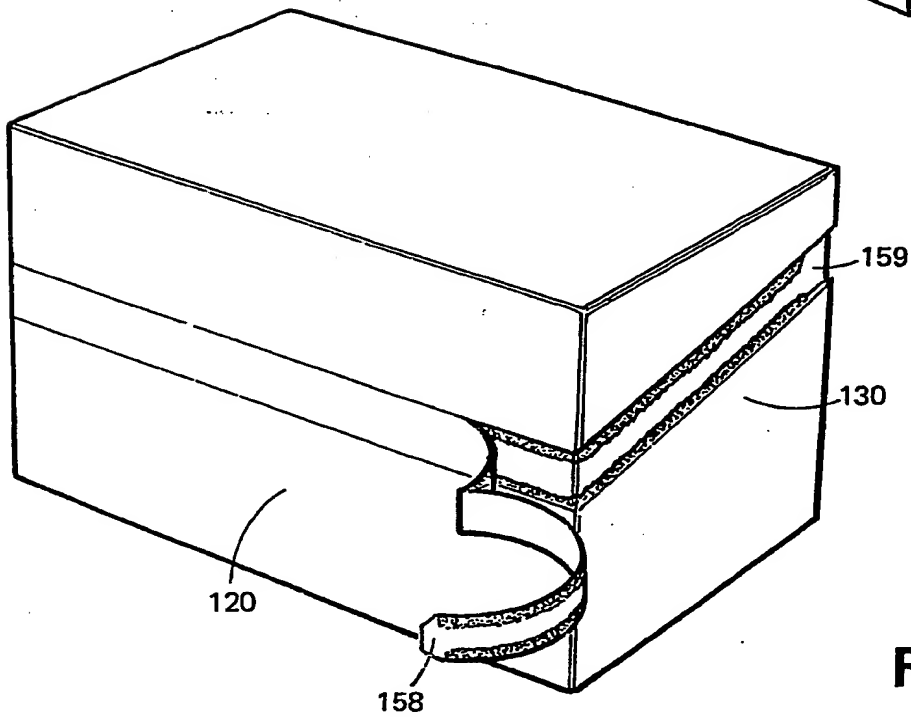


FIG. 9

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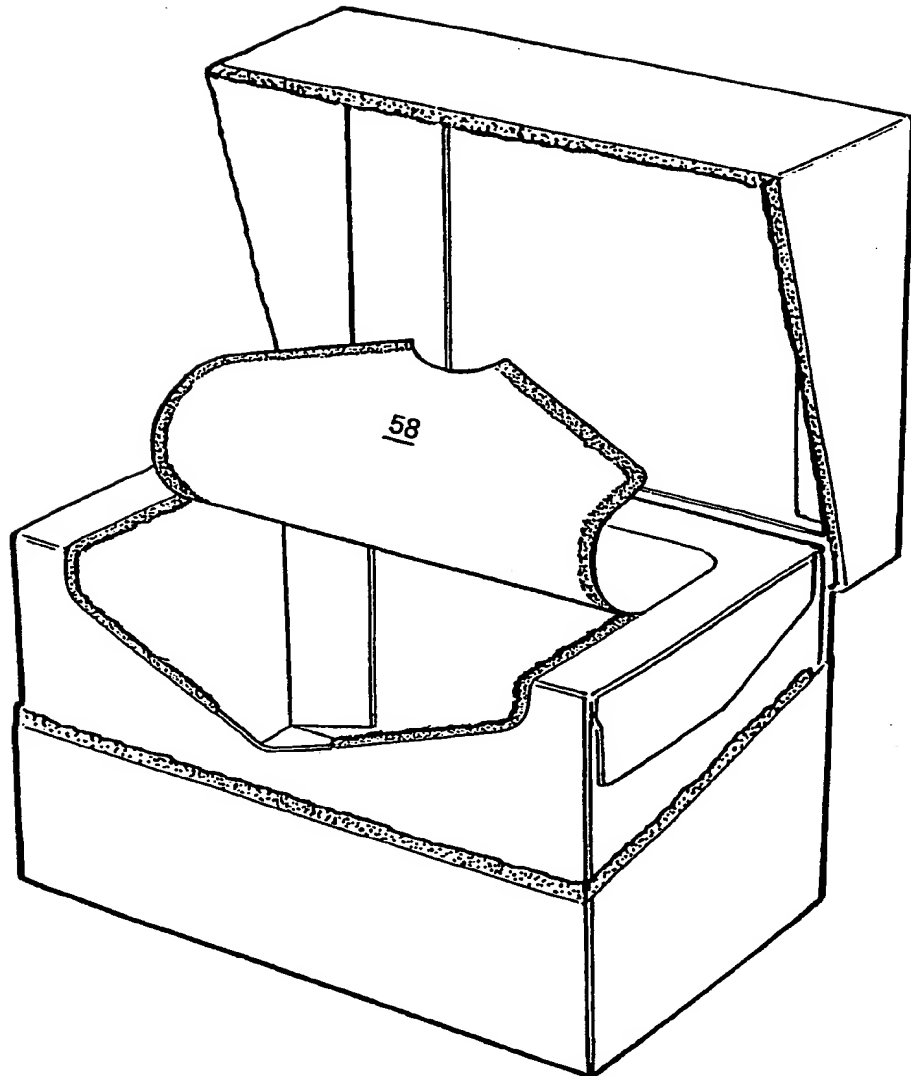


FIG. 10

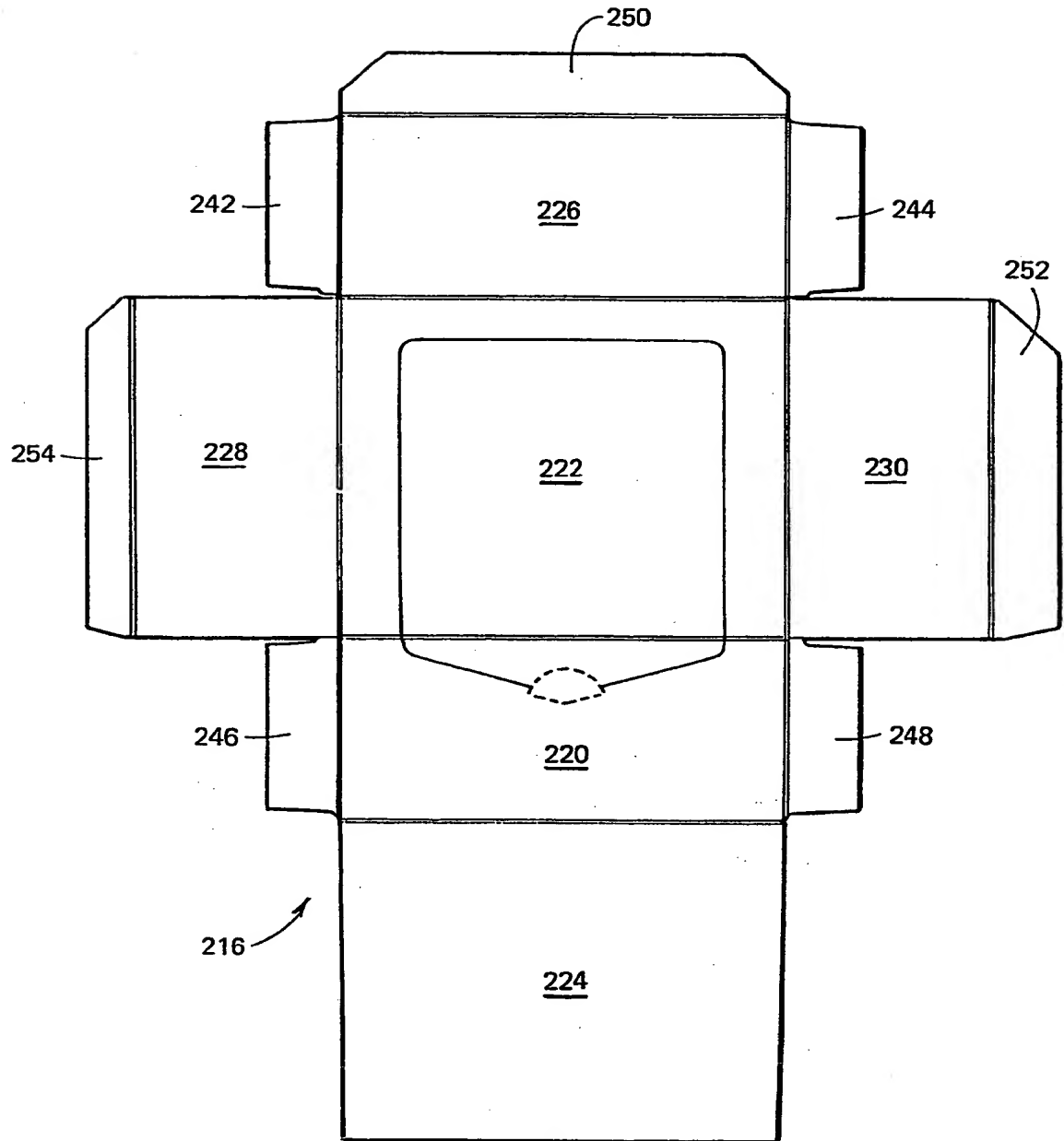


FIG. 11

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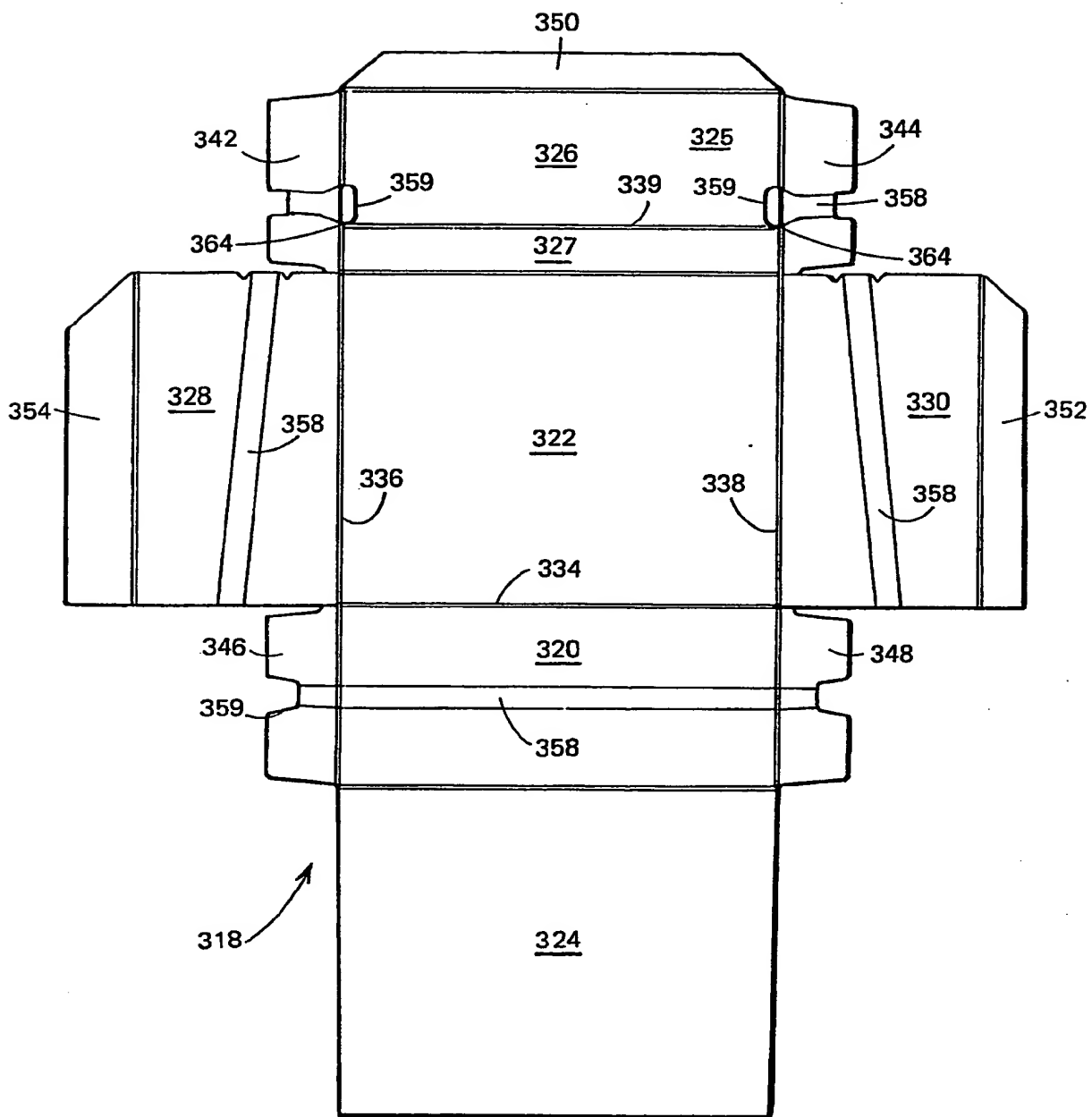


FIG. 12

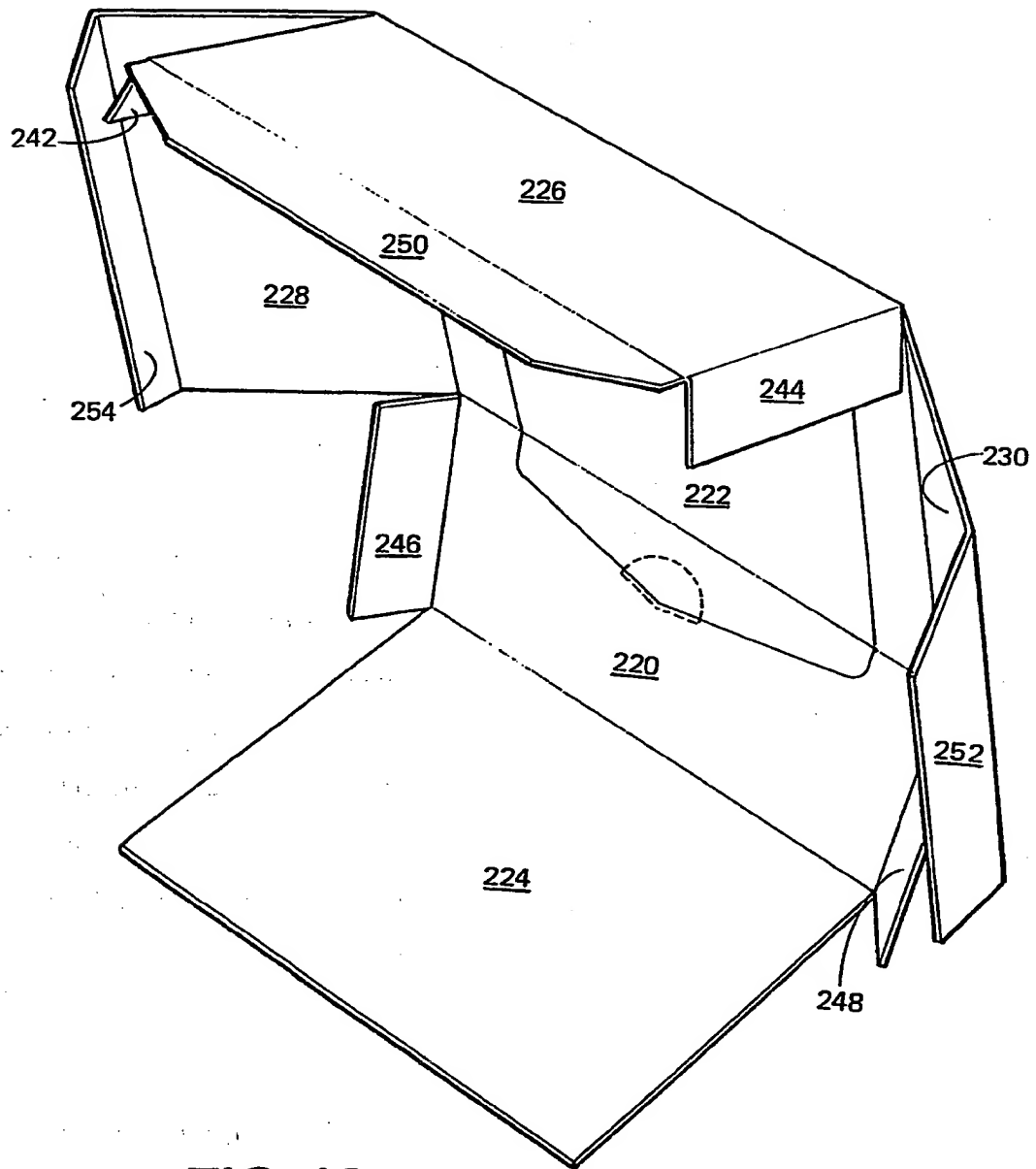


FIG. 13



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DESCRIPTION

A CONTAINER

The present invention relates to a container, and more particular though not exclusively, to a container for use with loose particulate or bagged materials such as tea, herbs and similar beverages; it also relates to the container blanks for producing the container intermediates formed therefrom and a method of assembling the container.

It is one object of the present invention to produce a container or presentation box which is tamper evident, aesthetically pleasing, practical, and which also provides product protection.

One particular problem with containers designed for the food and beverage market is that the container should be both aesthetically pleasing yet strong enough to withstand daily opening and closing. It should also be possible to close or seal the container adequately after opening so that the contents of the container will remain fresh when correctly stored.

According to one aspect of the present invention there is provided a container, comprising a pair of nesting containers, formed by an inner container, to be filled, and an outer container which snugly surrounds the inner container, the outer container

comprising a lid portion which can be displaced from a base portion to reveal the inner container, which inner container has a lid portion which can be removed or displaced to reveal a contents space therein, the lid portion of the outer container being capable of closing or sealing the inner container when the lid portion thereof has been removed or displaced.

Preferably, the lid portion and base portion of the outer box are hinged to one another such that the lid portion can pivot relative to the base portion.

The outer container has means allowing the lid portion to be released from the base portion. Preferably this means is a strip situated between the lid portion and base portion which strip can be removed. Preferably the strip runs from a first side panel via a front panel to a second side panel, a rear panel thereby forming the hinge between the lid portion and base portion of the outer container.

In another embodiment the strip may run right around the outer box such that the lid portion can be removed from the base portion.

The container of the type described is constructed from two blanks, a blank which makes up the inner container, and a blank which makes up the outer container.

According to a further aspect of the present invention there is provided a container blank for an outer container which blank comprises six panels, which panels form respectively a base, a top, a front, a rear and two side walls on construction, the carton blank having thereon a line of weakness across the front and two side panels.

In one embodiment the blank will be of generally cruciform configuration having six panels; the rear, top, front, and base form the down piece of the cruciform and the two side panels form the cross piece. The top and base panel will be spaced from one another by either the rear or front panel. The side panels will extend from one of the middle two panels of the down piece of the cruciform.

Thus, the down piece could be ordered as follows: either top, front, base, rear; front, base, rear, top; base, rear, top, front; rear, top, front, base; top, rear, base, front; rear, base, front, top; base, front, top, rear; or front, top, rear, base, with the side panels extending outwardly from one of the respective two middle panels of the down piece.

At least four gluing tabs may be provided to glue the container blank into an open box-like structure. Four gluing tabs may be provided on the side panels or they may be provided on the panels directly above and

below the panel of the down piece from which the cross piece extends. Alternatively, there may be provided one on each of the four panels around the centre panel of the cruciform. These gluing tabs enable the blanks to be glued into an "open" box like structure.

The blank will have a further three gluing tabs for closing the "open" box structure formed above and these will be provided at the ends of the two side panels and the end of one of the end panels of the down piece of the cruciform.

Preferably the tabs on the ends of each of the two side panels will be of different lengths, one shorter one longer, and the one extending from the terminal panel of the down piece of the cruciform of the outer container will be shorter than the corresponding tab on the inner container which is referred to hereafter.

Preferably, the line of weakness on the front panel runs substantially parallel with a foldline formed between the front and top panel.

Preferably, the lines of weakness on the side panels run at an angle of between 10 and 20°, to the axis of the cross piece when the side panels extend from the front or rear panel and at an angle of between 10 to 20° to the axis of the down piece when the side panels extend from the top or base panel.

In a further embodiment the panel could be substantially 'T' shaped, the side panels forming the cross piece of the 'T'.

In accordance with a further aspect of the present invention there is provided a container blank for an inner container comprising six panels which panels form respectively a base, a top, a front, rear and two side walls on construction, the container blank having thereon a line of weakness on either the front and/or top panel defining a portion to be removed or displaced.

Preferably the portion to be removed or displaced includes a "push out" portion to facilitate the easy removal of the portion to be removed or displaced. Removal or displacement is thus achieved by pushing out the "push out" portion and peeling the remaining portion back to displace or remove it.

In accordance with a further aspect of the invention there is provided a method of producing a container as hereinbefore described the method comprising assembling respective inner and outer container blanks into "open" box like structures, filling the partially assembled inner container, sealing it and then sealing the outer container around the inner container.

Preferably, the inner and outer container are

partially assembled simultaneously, the outer container being assembled about the inner container.

Thus, in one embodiment, the container blank for the inner container is positioned over the container blank for the outer container and a nesting, "open" box like structure is formed by folding the respective blanks about a die. The inner open box is then filled, closed and sealed and the outer box is then closed and sealed about the inner box.

To help the mechanisation of the process, the gluing tabs of the "open" inner box structure are differently sized to the corresponding gluing tabs of the "open" outer box structure. As a result a mechanised process can be used to push the tabs of the inner box in, and then glue the sealing panel of the inner box thereto before the tabs of the outer box are pushed in and the sealing panel of the outer box is glued thereto.

In this regard, the respective sealing panels of the inner and outer boxes are also differently sized.

Thus the inner box has a short tab, two long tabs and a short sealing panel and the outer box has a long tab, two short tabs and a long sealing panel.

The respective open box structures can thus be considered to comprise a pair of differently sized tabs, each pair member being positioned opposite the

other, and being of the opposite type to the corresponding tab of the other box.

A third tab is effectively paired with the sealing panel which is the last panel to be glued, thereby closing and sealing the "open" box structure. On the inner box this tab is long and on the outer box this tab is short. The terms "long" and "short" are relative terms which will be understood in context with their function in the mechanised gluing of the tabs.

Specific embodiments of the present invention will now be described, by way of example only, with reference to the following Figs. in which:-

Fig. 1 is a perspective view of one embodiment of the container of the invention shown with the inner box and outer box open;

Fig. 2 is a perspective view of the embodiment illustrated in Fig. 1 in which the outer box has been opened and the inner box remains unopened;

Fig. 3 is a perspective view of the embodiment of Fig. 1 in which the outer box encloses the inner box;

Fig. 4 is a plan view of the internal face of one embodiment of a blank for an inner box;

Fig. 5 is a perspective view of the blank of Fig. 4 partially folded;

Fig. 6 is a perspective view from above, behind

and one side of an inner box constructed from the blank of Fig. 4;

Fig. 7 is a plan view of the internal face of one embodiment of a blank for an outer box;

Fig. 8 is a perspective view of the blank of Fig. 7 partially folded to form an open box structure about an open box structure formed from the blank of Fig. 4;

Fig. 9 is a perspective view of the container of Fig. 3 showing the outer box being opened to give rise to the configuration illustrated in Fig. 2;

Fig. 10 is a perspective view of the container of Fig. 2 showing the inner box being opened to give rise to the configuration shown in Fig. 1;

Fig. 11 is a plan view of the internal face of an alternative embodiment of a blank, for an outer box;

Fig. 12 is a plan view of the internal face of an alternative embodiment of a blank for an inner box;

Fig. 13 is a perspective view of the blank of Fig. 11 partially folded; and

Fig. 14 is a perspective view of the blank of Fig. 12 partially folded to form an open box structure about the open box structure formed from the blank of Fig. 11.

Referring to Fig. 1 the container 10 of the invention comprises a first inner container 12 and a second outer container 14. In one embodiment the

container 10 is constructed from an inner blank 16 (Fig. 4) and an outer blank 18 (Fig. 7). Inner blank 16 forms the inner container or box 12 (Fig. 6) of the container 10 and outer blank 18 forms the outer container or box 14 of the container 10 (Fig. 3).

The following description describes a container according to the invention and includes therein a description of: inner and outer container blanks according to the invention; "open" box structures; a method of constructing the container from inner blank 16 and outer blank 18, and a description of how the container 10 is subsequently opened and closed.

Referring to Fig. 4 the substantially cartonboard blank 16, which could be made from any suitable material, for example, cardboard, plastics, metal plastics or any other metal coated material, which on construction will form the inner container 12 of container 10 is of a generally cruciform shape. It comprises six panels 20, 22, 24, 26, 28, and 30. Panel 20 forms the front face of the container, panel 22 forms the top face of the container, panel 24 forms the base of the container, panel 26 forms the rear face of the container and panels 28 and 30 form the respective side walls of the container.

The blank also comprises five fold lines 32, 34, 36, 38 and 40. These can be found between front panel

20 and top panel 22, front panel 20 and base panel 24, front panel 20 and side panel 28, front panel 20 and side panel 30, and base panel 24 and rear panel 26 respectively.

The blank 16 further comprises seven gluing tabs 42, 44, 46, 48, 50, 52 and 54. Tabs 42 and 44 project from the top panel 22 and tabs 46 and 48 project from base panel 24. These tabs 42, 44, 46 and 48 enable the side panels 28 and 30 to be connected to the top panel 22 and base panel 24. Tab 54 is shorter than Tab 52. This is important when the container of the invention is constructed using mechanised machinery.

In other embodiments (see for example Fig. 11) the gluing tabs may be positioned differently to achieve the same object namely that of gluing the side panels to at least two other panels to form an "open" box structure, the side panels being already connected to one panel.

The blank 16 has thereon a line of weakness 56 which line of weakness may, for example, comprise perforations, score marks of the like. Line of weakness 56 defines a portion 58 which will be removed from the constructed container by the user (Fig. 10). It is preferred that the line of weakness 56 is of the type comprising a first score line on one side of the sheet, which score line lies displaced by

a substantially constant amount to a second score line on the other side. This type of line of weakness is produced by a process called Concora. To aid in the removal of the portion 58 defined by the weakness line 56, a "push out" piece 60 defined by a perforation line 62 is included therein. Thus, to remove the portion 58 "push out" piece 60 is pressed into the container thereby enabling the portion 58 to be pulled back (Fig. 10). The portion 58 to be removed lies substantially within top panel 22 and extends approximately one third of the way down front panel 20. It is substantially pentagonal in shape and the "push out" portion 60 lies within front panel 20 at the periphery thereof.

It will, however, be appreciated that the portion 58 to be removed could be positioned solely in top panel 20.

The part folded inner blank 16 (Fig. 5) i.e. one in which the side panels 28 and 30 have been glued to the top panel 22 and base panel 24 around the front 20 can be filled with a commodity, for example, tea, herbs or other beverage which commodity may be packaged directly into the "open" box structure formed, or indirectly, via for example, a sealed bag.

In this embodiment it is preferred that the gluing tabs 42, 44, 46 and 48 are glued to side panels

28 and 30 on the outer face. The resulting container can then be sealed by folding rear panel 26 against tabs 52, 54 and 50 and gluing it thereto.

The filled open inner box structure 12 can then have an outer container 14 closed and sealed around it (Fig. 8).

In an alternative embodiment, a part folded inner blank 216 (Fig. 13) i.e. one in which the side panels 228 and 230 have been glued to the rear panel 226 and the front panel 220 about top panel 222 can be filled with a commodity, which commodity can be packaged directly or indirectly into the "open" box structure formed.

In this embodiment it is preferred that the gluing tabs 242, 244, 246 and 248 are glued to side panels 228 and 230 on the inner face.

The resulting container can then be sealed by folding base panel 224 against tabs 250, 252 and 254 and gluing it thereto.

The filled open box structure can then have an outer container 314 closed and sealed around it (Fig. 14).

Referring to Fig. 7 the outer blank 18 is also made from cartonboard although like inner blank 16 it could be made of any other material, for example, plastics, metal plastics or a metal coated

material. It too is preferably of a generally cruciform shape. It comprises six panels which are numbered so that like parts are numbered to correspond. Each embodiment however has a different prefix. Thus, front panel 20 of inner blank 16 becomes front panel 120 of outer blank 18. The outer blank 18 comprises six panels 120, 122, 124, 126, 128 and 130. Panel 120 forms the front face of the container, panel 122 forms the top face of the container, panel 124 forms the base of the container, panel 126 forms the rear face of the container and panels 128 and 130 form the respective side walls of the container.

The blank 18 also comprises five fold lines 132, 134, 136, 138 and 140 between, front panel 120 and top panel 122, front panel 120 and base panel 124, front panel 120 and side panel 128, front panel 120 and the other side panel 130, and the base panel 124 and rear panel 126 respectively. A further fold line 139 divides rear panel 126 into sub-portions 125 and 127. Fold line 139 acts to hinge the lid to the base of the container in the finished products.

The blank 18 further comprises seven gluing tabs, 142 and 144, and 146 and 148 each of which project from the side panels 128 and 130 enable the side panels to be connected to the top and base panels 122

and 124.

Whilst the gluing tabs could be positioned differently to achieve the same object, namely to bring the respective panels together, it is preferred that the gluing tabs are on different panels to those of blank 16 so that the completed container comprising the inner container and outer container do not have thickened areas one above the other caused by the gluing tabs. Thus, on blank 16 the side panels are glued to the top panel and base panel respectively whereas in blank 18 the top panel and base panel are glued to the side panels. The reverse situation or a hybrid between the two could be used.

Alternatively, the gluing tabs of the respective inner and outer containers may be superimposed one on another.

In practice the container 10 is preferably constructed on mechanised machines which fold the outer blank 18 around the inner blank 16.

Referring to Fig. 8, the inner and outer blanks of Fig. 4 and 7 are constructed into nesting open box structures. The tabs on the inner and outer containers project from their respective panels by different amounts.

For example, in the Fig. 8 embodiment, the sides 28 and 30 of the inner container have one long tab 52

and one short tab 54. The long tab 52 is paired with a short tab 152 on the side 130 of the outer container and the short tab 54 is paired with a long tab 154 on the other side 128 of the outer container. Similarly, the tab 50 projecting from the top panel 22 of the inner container is long, whereas the tab 150 projecting from the top panel 122 of the outer container is short. Opposite these however the rear panel 26 of the inner container is shorter than the rear panel 126 of the outer container.

Such an arrangement allows for easy gluing of the nested boxes mechanically since probes can be used to close and seal the inner container before the outer container. Thus in practice, a probe passes across the side panels from left to right as viewed in Fig. 8 pushing tab 52 inwards and tab 154 outwards. Another or the same probe then passes from right to left pushing the tab 54 inwards. A probe also passes from bottom to top as viewed in Fig. 8 pushing tab 50 inwards and panel 126 outwards and then another or the same probe passes from top to bottom closing panel 26 onto tabs 50, 52 and 54.

A similar procedure can be then used to close and seal the outer box by pushing tabs 150, 152 and 154 inwards and panel 126 there over.

A similar operation can be performed in respect

of the Fig. 14 embodiment.

Alternatively the inner container may be pre-assembled and placed on the outer blank 18 so that the respective front panels of the containers abut one another. Thus, the outer blank 18 is constructed around the inner container by bringing side panels 128 and 130 up against the side panels 28 and 30 of the inner box, folding tabs 146 and 148 around the base panel 24 of the inner box and gluing down the respective base panels 24 and 124.

Other features which are important can be best explained with reference to the following figures.

Referring back to Fig. 7 lines of weakness 156, define a portion 158 to be removed from the constructed outer container thereby enabling the inner container to be opened.

It is preferred that these lines of weakness are of a type already described with reference to the lines of weakness formed on the inner blank 16.

In the embodiment illustrated the line of weakness 156 defines a portion 158 forming a tear strip. To facilitate easy opening of the outer box side panels 128 and 130 have finger size cutaways 159 made therein, which cutaways enable the tear strip 158 to be easily gripped in the constructed article.

The tear strip 158 runs from below a hinge line

164 marked on tab 154, across side panel 128 to front panel 120 at an angle of about 15° to the axis of the cross piece, across approximately the middle of the front panel 120, parallel to fold line 132, to foldline 138, and across side panel 130 at an angle of about 15° to the axis of the cross piece to just below hinge line 166 of tab 152. Thus, in the folded container the top panel 122 folds over side tabs 152 and 154 and is glued in position. Tab 150 is glued to sub-portion 127 to form the hinge about which the lid will pivot once the tearaway strip 158 has been removed.

The completed container will appear as a single box with a tear strip 158 running around the front face 120 and two sides 128, 130 thereof (Fig. 3). To open the container tear strip 158 is torn from the container (Fig. 9) by gripping the tear strip at cutaway 159 and pulling it away so that the lid of the outer box can be opened by pivoting it open about the hinge 127 (Fig. 2). The inner container can then be opened by puncturing the "push out" portion 62 of the inner container and peeling the portion 58 to be removed, away from the inner box (Fig. 10). In this way, the filling contained in the inner container can be accessed.

In order to keep the contents fresh whilst

correctly stored and in order to avoid spillage the container can then be closed by bringing the lid down over the opening thereby sealing or closing the container.

The type of container illustrated can be prepared from a variety of blanks or partially pre-glued cartons and to illustrate this point Figs. 11 and 12 indicate alternative forms of inner and outer blanks respectively whilst Figs. 13 and 14 illustrate aspects of these other embodiments construction.

Thus, the inner blank 216 illustrated in Fig. 11 is of a cruciform shape comprising a top panel 222, situated in the centre of the cruciform (compared to Fig. 4 in which panel 22 is at the top of the cruciform shape), a front panel 220, a base panel 224, a rear panel 226 and side panels 228 and 230.

Tabs 242, 244, 246 and 248 serve to connect the rear and front panels to the side panels and tabs 250, 252, and 254 serve to secure the base 224 to the front, rear, and side panels.

With reference to Fig. 12 the outer panel 318 is of generally cruciform shape with the top panel 322 being at the centre of the cruciform. It too comprises a rear panel 326 sub-divided by a foldline 339 into a sub-panel 327 which forms the hinge and another sub-panel 325. Front panel 320 and side

panels 328 and 330 have thereon lines of weakness 358 which define tearaway portions. The tearaway portions 358 on side panels 328 and 330 are inclined at an angle of about 15° to the foldlines 336 and 338 between the top panel 322 and the respective side panels 328 and 330. The tearaway portion 358 on the front panel 320 runs substantially parallel to the foldline 334 laying between top panel 322 and front panel 320. Since tabs 342 and 344 are glued to side panels 328 and 330 respectively they too are marked with tearaway portions 358 and are marked with portions 359 which can be easily gripped so that the tabs 358 can be easily torn away.

Alternatively these portions could be cut out from the blank 318.

As has been described with reference to Figs. 5 and 8, the blanks of Fig. 11 and 12 are first glued into open box structures. Inner blank 216 is folded in the manner illustrated in Fig. 13 so that gluing tabs 242, 244, 246 and 248 are glued to the inside of side panels 228 and 230. This contrasts to the partially folded inner box of Fig. 5 in which the glue tabs 42, 44, 46 and 48 are glued to the outside of side panels 28 and 30.

The "open" box structure of the Fig. 11 embodiment is thus filled through the base panel 224.

This contrasts with the case in the Fig. 4 embodiment in which the box is filled through the rear panel 26. These panels have been more generally referred to as the sealing panels in the context of the containers construction.

As has been described with reference to Fig. 8, the nested open box structure of Fig. 14 can be mechanically sealed, the gluing tab pairs 252, 352; 254, 354 and 250, 350 of the inner and outer box are similarly of different sizes so that they project to different heights in the open box configuration.

As well as the cruciform shaped blanks illustrated, it will be appreciated by the man skilled in the art that 'T'-shaped blanks or pre-glued cartons could be used.

Where reference has been made to gluing tabs and glued and pre-glued cartons it will be understood that other appropriate sealing means, for example, heat sealing could be used, and consequently the terms should be construed accordingly.

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CLAIMS

1. A container, comprising a pair of nesting containers, formed by an inner container, to be filled, and an outer container which snugly surrounds the inner container, the outer container comprising a lid portion which can be displaced from a base portion to reveal the inner container, which inner container has a lid portion which can be removed or displaced to reveal a contents space therein, the lid portion of the outer container being capable of closing or sealing the inner container when the lid portion thereof has been removed or displaced.

2. A container as claimed in claim 1 in which a means allowing the lid portion of the outer container to be displaced from the base portion thereof is a strip situated between the lid portion and base portion, which strip can be removed to reveal the inner container.

3. A container as claimed in claim 2 wherein the strip of the outer container runs from a first side panel via a front panel to a second side panel, and a rear panel or a sub-portion of the outer container forms a hinge between the lid portion and base portion such that the lid portion can pivot relative to the base portion.

4. A container as claimed in claim 2 wherein the strip runs right around the outer container such that the lid portion can be removed from the base portion.

5. A container as claimed in any of claims 1 to 4 in which the container is constructed from 2 blanks, a first blank forming the outer container and a second blank forming the inner container.

6. A container blank for an outer container, which blank comprises 6 panels, which panels form respectively a base, a top, a front, a rear and two side walls on construction, the container blank having thereon a line of weakness across the front and two side panels.

7. A container blank for an inner container comprises six panels, which panels form respectively a base, a top, a front, rear and two side walls on construction, the container blank having thereon a line of weakness on either the front and/or top panel defining a portion to be removed or displaced.

8. A container blank as claimed in claim 6 or 7 of generally cruciform configuration.

9. A container blank as claimed in claim 8 in which the base, top, front and rear portions form a down piece having two middle panels and two end panels and the two side walls extend from one of the middle two panels of the down piece.

10. A container blank as claimed in claim 6 or 7 of generally "T-shaped" configuration.

11. A container blank as claimed in claim 10 in which the base, top, front and rear panels form a down piece having two middle panels and two end panels and the two side walls extend from one of the end two panels of the down piece.

12. A container blank as claimed in any of claims 6 to 11 which further comprises at least four gluing tabs, which gluing tabs enable the blank to be glued into an "open-box" like structure.

13. A container blank as claimed in claim 12 which in addition to the at least four gluing tabs comprises at least three further gluing tabs which further gluing tabs enable the "open-box" like structure to be closed.

14. A container blank as claimed in claim 13 in which at least two of the further gluing tabs extend from the side panels by different amounts.

15. A container blank as claimed in any of claims 6 to 14 in which the lines of weakness are produced by scoring or perforating the container blank.

16. A container blank as claimed in claim 15 in which the lines of weakness comprise a first scoreline on one side of the container blank, which first

scoreline lies displaced a substantially constant amount from a second scoreline on the other side of the container blank.

17. A container blank as claimed in any of claims 6 to 16 in which the container is constructed from cardboard, carton-board, a metal coated material, metal plastics, or plastics.

18. A container blank as claimed in any of claims 6, and 8 to 17 when appended to claim 6 in which the line of weakness runs across the front panel so as to be substantially parallel with a fold line formed between the front and top panel.

19. A container blank as claimed in claim 18 in which the line of weakness runs across the side panels at a angle of between 10 and 20° to an axis running through a down piece when the side panels extend from the top or base panel.

20. A container blank as claimed in claim 19 where the line of weakness runs across the side panel at an angle of 15° to the axis of the down piece when the side panels extend from the top or base panel.

21. A container blank as claimed in claim 18 in which the line of weakness runs across the side panels at an angle of between 10 and 20° to the fold line formed between the top and front panel when the side panels extend from the front or rear panel.

22. A container blank as claimed in claim 21 wherein the line of weakness runs from the side panel at an angle of 15° to the fold line formed between the top and front panel when the side panel extends from the front or rear panel.

23. A container blank as claimed in any of claims 18 to 22 in which the rear panel is sub-divided by a fold line into a sub-panel which serves as a hinge between the base portion and lid portion when the blank is constructed.

24. A container blank as claimed in any of claims 18 to 23 in which some of the panels are provided with means enabling a tear-away strip defined by the lines of weakness to be easily gripped.

25. A container blank as claimed in any of claims 7 and 8 to 17 when appended to claim 7 in which the portion to be removed or displaced lies substantially within the top panel and extends approximately one third of the way down the front panel.

26. A container blank as claimed in claim 25 in which the portion to be removed is substantially pentagonal in shape.

27. A container as claimed in claim 25 or 26 which further comprises a "push-out" portion to facilitate the easy removal or displacement of the

portion defined by the line of weakness.

28. A container blank as claimed in any of claims 25 to 27 in which the said line of weakness is produced on the front and/or top panel.

29. A method of producing a container as claimed in claim 1 the method comprising assembling respective inner and outer container blanks into an "open-box like structure" filling the partially assembled inner container, sealing it and then sealing the outer container around the inner container.

30. A method as claimed in claim 29 in which the inner and outer container blanks are assembled simultaneously into an open box like structure the outer container being assembled about the inner container.

31. A container comprising a pair of nesting containers formed by an inner container to be filled and an outer container which snugly surrounds the inner container substantially as herein before described with reference to figures 1 to 14.

32. A container blank for an outer container substantially as herein before described with reference to figure 7 or 12.

33. A container blank for an inner container substantially as herein before described with reference to figures 4 or 11.

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Amendments to the claims have been filed as follows

1. A container, comprising a pair of nesting containers, formed by an inner container, to be filled, and an outer container which snugly surrounds the inner container on all sides, the outer container comprising a lid portion having a top portion and four side portions which can be displaced relative to a base portion on breaking a first tamper evident seal to reveal the inner container, which inner container has a lid portion which can be removed or displaced on breaking a second tamper evident seal to reveal a contents space therein, the lid portion of the outer container being capable of closing or sealing the inner container when the lid portion thereof has been removed or displaced.
2. A container as claimed in claim 1 in which the inner and outer containers are cartons.
3. A container as claimed in claim 2 wherein the inner and outer containers are made from cartonboard, plastics, metal plastics or a metal coated material.
4. A container as claimed in claim 1, 2 or 3 in which the first tamper evident seal is a strip situated between the lid portion and base portion of

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the outer container, which strip can be removed allowing the lid portion of the outer container to be displaced from the base portion thereof to reveal the inner container.

5. A container as claimed in claim 4 wherein the strip of the outer container runs from a first side panel via a front panel to a second side panel, and a rear panel or a sub-portion thereof forms a hinge between the lid portion and base portion such that the lid portion can pivot relative to the base portion.

6. A container as claimed in claim 4 wherein the strip runs right around the outer container such that the lid portion can be removed from the base portion.

7. A container as claimed in any of the preceding claims wherein the second tamper evident seal is a line of weakness defining the lid portion of the inner container.

8. A container as claimed in any of claims 1 to 7 in which the container is constructed from 2 blanks, a first blank forming the outer container and a second blank forming the inner container the first blank comprises 6 panels, which panels form respectively a base, a top, a front, a rear and two

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side walls on construction, the container blank having thereon a line of weakness across the front and two side panels and the second blank comprises six panels, which panels form reespectively a base, a top, a front, rear and two side walls on construction, the container blank having thereon a line of weakness on either the front and/or top panel defining a portion to be removed or displaced.

9. A container as claimed in claim 8 in which each container further comprises at least four gluing tabs, which gluing tabs enable each blank to be glued into an "open-box" like structure.

10. A container as claimed in claim 9 in which each container blank has in addition to the at least four gluing tabs at least three further gluing tabs which further gluing tabs enable the "open-box" like structures to be closed.

11. A container as claimed in claim 10 in which each "open-box" like structure comprises a pair of differently sized gluing tabs, each member of the pair being positioned opposite the other and being of an opposite type, long or short, to the corresponding gluing tab of the other "open-box" like structure, and a third gluing tab which is paired with a sealing

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panel which is the last panel to be glued thereby closing and sealing the "open-box" like structure.

12. A container as claimed in claim 11 wherein the inner "open-box" like structure has a short gluing tab, two long gluing tabs and a short sealing panel, and the outer "open-box" like structure has a long gluing tab, two short gluing tabs and a long sealing panel.

13. A container as claimed in any of claims 8 to 12 in which the lines of weakness on each container blank are produced by scoring or perforating each container blank.

14. A container as claimed in claim 13 in which the lines of weakness produced by scoring comprise a first scoreline on one side of the container blank, which first scoreline lies displaced a substantially constant amount from a second scoreline on the reverse side of the container blank.

15. A container as claimed in claim 8 in which the line of weakness on the first blank runs across the front panel so as to be substantially parallel with a fold line formed between the front and top panel.

16. A container as claimed in claim 15 in which the line of weakness on the first blank runs across the

side panels at an angle of between 10 and 20° to an axis running through a down piece when the side panels extend from the top or base panel.

17. A container as claimed in claim 16 where the line of weakness on the first blank runs across the side panel at an angle of 15° to the axis of the down piece when the side panels extend from the top or base panel.

18. A container as claimed in claim 15 in which the line of weakness runs on the first blank across the side panels at an angle of between 10 and 20° to the fold line formed between the top and front panel when the side panels extend from the front or rear panel.

19. A container as claimed in claim 18 wherein the line of weakness on the first blank runs from the side panel at an angle of 15° to the fold line formed between the top and front panel when the side panel extends from the front or rear panel.

20. A container as claimed in any of claims 15 to 19 in which the rear panel of the first blank is subdivided by a fold line into a sub-panel which serves as a hinge between the base portion and lid portion when the first blank is constructed.

21. A container as claimed in any of claims 15 to

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20 in which at least one of the panels of the first blank is provided with means enabling a tear-away strip defined by the lines of weakness to be easily gripped.

22. A container as claimed in any of claims 8 to 14 in which the portion to be removed or displaced from the second blank lies substantially within the top panel and extends approximately one third of the way down the front panel.

23. A container as claimed in claim 22 in which the portion to be removed from the second blank is substantially pentagonal in shape.

24. A container as claimed in claim 22 or 23 which further comprises a "push-out" portion in the second blank to facilitate the easy removal or displacement of the portion defined by the line of weakness.

25. A container as claimed in any of claims 21 to 24 in which the line of weakness on the second blank is produced on the front and/or top panel.

26. A method of producing a container as claimed in any of claims 1 to 25, the method comprising assembling simultaneously respective inner and outer container blanks into an "open-box" like structure the outer container being assembled about the inner

container, filling the partially assembled inner container, sealing it and then sealing the outer container around the inner container.

27. A method as claimed in claim 26 wherein the "open-box" like structure is formed by folding the respective blanks about a die.

28. A method as claimed in claim 26 or 27 when dependent on claim 12 in which a probe passes across the side panels pushing the long gluing tab of the inner "open-box" like structure inwards and the long gluing tab of the outer "open-box" like structure outwards, the or another probe then pushes the short gluing tab of the inner "open-box" like structure inwards and the short gluing tab of the outer box like structure outwards, the or another probe then pushes the long third gluing tab of the inner "open-box" like structure inwards and the long sealing panel of the outer "open-box" like structure outwards, the or another probe then pushes the short sealing panel of the inner "open-box" like structure inwards sealing it to the said gluing tabs of the inner "open-box" like structure; a mechanized procedure then follows to close and seal the outer "open-box" like structure around the closed and

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sealed inner container by pushing the two short and one long gluing tabs inwards and the long sealing panel of the outer "open-box" like structure inwards, sealing it to the said gluing tabs of the outer "open-box" like structure.

29. A container comprising a pair of nesting containers formed by an inner container to be filled and an outer container which snugly surrounds the inner container on all sides substantially as herein before described with reference to figures 1 to 14.

30. A method of producing a container as hereinbefore described, the method comprising assembling respective inner and outer container blanks substantially as hereinbefore described with reference to figures 1 to 14.

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Patents Act 1977
Examiner's report to the Comptroller under
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Relevant Technical fields		Search Examiner
(i) UK CI (Edition	K) B8P (PA,PG1,PK2,PK8,PK9) .	MIKE HENDERSON
(ii) Int CI (Edition	5) B65D 5/56; 5/58; 5/60	
Databases (see over)		Date of Search
(i) UK Patent Office		22 OCTOBER 1992
(ii)		

Documents considered relevant following a search in respect of claims 1-5, 29-31

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB 2236737 A (SHIN YE LEE) whole specification relevant	1, 5, 29
X	GB 2111462 A (TRI-WALL CONTAINERS LTD) whole specification relevant	1, 5, 29
X	GB 1364053 (DRG PACKAGING LTD) whole specification relevant	1, 5, 29
X	GB 1289577 (REED INTERNATIONAL LTD) whole specification relevant	1, 5, 29
X	GB 1279232 (TANKS & DRUMS LTD) whole specification relevant	1, 29
X	GB 980551 (ROSE BROS (GAINSBOROUGH) LTD) whole specification relevant	1

Category	Identity of document and relevant passages	Relevant to claim(s)

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